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**CLAIMS:**

What is claimed is:

- 1 1. A method of generating a logically merged web module  
2 for a web application, comprising:  
3 determining if the web application includes a  
4 reference to at least one shared web module that may be  
5 incorporated into a plurality of web applications;  
6 identifying a location of the at least one shared  
7 web module; and  
8 logically merging the at least one shared web module  
9 with web modules of the web application, if any, to  
10 generate a logically merged web application.
- 1 2. The method of claim 1, further comprising:  
2 loading the logically merged web application into a  
3 web container.
- 1 3. The method of claim 1, wherein determining if the  
2 web application includes a reference to at least one  
3 shared web module includes determining if the web  
4 application includes a shared web module designation  
5 file.
- 1 4. The method of claim 1, wherein the web application  
2 is an enterprise archive (EAR) and wherein the logically  
3 merged web application is a logically merged EAR.
- 1 5. The method of claim 1, wherein the at least one  
2 shared web module includes at least one of a web archive

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3 (WAR) file, an enterprise java bean (EJB) archive file,  
4 and a resource archive (RAR) file.

1 6. The method of claim 1, wherein logically merging the  
2 at least one shared web module with web modules of the  
3 web application includes:

4 determining a priority associated with the at least  
5 one shared web module; and

6 resolving any conflicts between shared web modules  
7 in the at least one shared web module and conflicts  
8 between the at least one shared web module and web  
9 modules of the web application, if any.

1 7. The method of claim 1, wherein the steps of  
2 determining, identifying, and logically merging are  
3 performed during an initialization process of a runtime  
4 environment for initializing the web application to be  
5 run on a server.

1 8. The method of claim 1, wherein logically merging the  
2 at least one shared web module with the web modules of  
3 the web application includes using a service provider  
4 interface (SPI) that provides merge logic for merging  
5 different module types.

1 9. The method of claim 2, wherein the container uses one  
2 or more application program interfaces (APIs) to identify  
3 a path to the at least one shared web module and loads  
4 the at least one shared web module when loading the  
5 logically merged web application.

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1 10. The method of claim 1, wherein logically merging the  
2 at least one shared web module with web modules of the  
3 web application includes at least one of relinking  
4 references to the at least one shared web module in the  
5 web modules of the web application, extrapolating policy  
6 information for the at least one shared web module from a  
7 policy file associated with the web application, and  
8 modifying a class path for the web application to include  
9 paths to each of the at least one shared web modules.

1 11. A computer program product in a computer readable  
2 medium for generating a logically merged web module for a  
3 web application, comprising:  
4 first instructions for determining if the web  
5 application includes a reference to at least one shared  
6 web module that may be incorporated into a plurality of  
7 web applications;  
8 second instructions for identifying a location of  
9 the at least one shared web module; and  
10 third instructions for logically merging the at  
11 least one shared web module with web modules of the web  
12 application, if any, to generate a logically merged web  
13 application.

1 12. The computer program product of claim 11, further  
2 comprising:  
3 fourth instructions for loading the logically merged  
4 web application into a web container.

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1 13. The computer program product of claim 11, wherein  
2 the first instructions for determining if the web  
3 application includes a reference to at least one shared  
4 web module include instructions for determining if the  
5 web application includes a shared web module designation  
6 file.

1 14. The computer program product of claim 11, wherein  
2 the third instructions for logically merging the at least  
3 one shared web module with web modules of the web  
4 application include:  
5 instructions for determining a priority associated  
6 with the at least one shared web module; and  
7 instructions for resolving any conflicts between  
8 shared web modules in the at least one shared web module  
9 and conflicts between the at least one shared web module  
10 and web modules of the web application, if any.

1 15. The computer program product of claim 11, wherein  
2 the first, second and third instructions are executed  
3 during an initialization process of a runtime environment  
4 for initializing the web application to be run on a  
5 server.

1 16. The computer program product of claim 11, wherein  
2 the third instructions for logically merging the at least  
3 one shared web module with the web modules of the web  
4 application include instructions for using a service  
5 provider interface (SPI) that provides merge logic for  
6 merging different module resources.

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1 17. The computer program product of claim 12, wherein  
2 the container uses one or more application program  
3 interfaces (APIs) to identify a path to the at least one  
4 shared web module.

1 18. The computer program product of claim 11, wherein  
2 the third instructions for logically merging the at least  
3 one shared web module with web modules of the web  
4 application include at least one of instructions for  
5 relinking references to the at least one shared web  
6 module in the web modules of the web application,  
7 instructions for extrapolating policy information for the  
8 at least one shared web module from a policy file  
9 associated with the web application, and instructions for  
10 modifying a class path for the web application to include  
11 paths to each of the at least one shared web modules.

1 19. An apparatus for generating a logically merged web  
2 module for a web application, comprising:  
3 means for determining if the web application  
4 includes a reference to at least one shared web module  
5 that may be incorporated into a plurality of web  
6 applications;  
7 means for identifying a location of the at least one  
8 shared web module; and  
9 means for logically merging the at least one shared  
10 web module with web modules of the web application, if  
11 any, to generate a logically merged web application.

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- 1 20. The computer program product of claim 19, further
- 2 comprising:
- 3 means for loading the logically merged web
- 4 application into a web container.